

**ABSTRACT**

The present invention is based on the discovery that overexpression of ΔFosB leads to bone formation and that ΔFosB expression inhibits adipogenesis. The present invention provides methods of identifying agents that modulate bone formation and adipogenesis. Moreover, the present invention provides methods for identifying genes that are modulated by ΔFosB and that modulates ΔFosB, osteogenesis, and adipogenesis.